IIT-JEE / ENGINEERING

MATHS

Assignment 1.0

Probability

By

BHARAT BHUSHAN @ B. K. NAL
Assistant Professor (Computer Science)
Director, BSTI, Kokar

&

SUPRIYA BHARATI
Assistant Professor (Computer Science)
Asst. Director, BSTI, Kokar

Buddha Science & Technical Institute
Kokar, Ranchi-834001, Jharkhand, India
www.bharatsir.com

Assignment 1.0

1. Two unbiased dice are thrown. Find the probability that neither a doublet nor a total of 10 will appear.
2. Two balls are drawn at random from a bag containing 2 white, 3 red, 5 green and 4 black balls, one by one without replacement. Find the probability that both the balls are of different colours.
3. Find the probability distribution of the number of heads in three tosses of a coin.
4. Two unbiased dice are thrown. Find the probability that neither a doublet nor a total of 8 will appear.
5. Two unbiased dice are thrown. Find the probability that the sum of the numbers obtained on the two dice is neither a multiple of 2 nor a multiple of 3.
6. Two balls are drawn at random from a bag containing 3 white, 3 red, 4 green and 4 black balls, one by one without replacement. Find the probability that both the balls are of different colours.
7. Two cards are drawn successively, with replacement, from a pack of 52 cards. Find the probability distribution of the number of aces drawn.
8. Two unbiased dice are thrown. Find the probability that the sum of the numbers obtained on the two dice is neither a multiple of 3 nor a multiple of 4.
9. Two cards are drawn from a well shuffled pack of 52 cards without replacement. Find the probability that neither a jack nor a card of spades is drawn.
10. The probability that a student A can solve a question is 6/7 and that another student B solving the question is 3/4 . Assuming that the two events " A can solve the question" and "B can solve the question" are independent , find the probability that only one of them solves the questions.
11. E and F are two events associated with a random experiment for which P(E) = 0.60, P(E or F) =0.85, P(E and F) = 0.42. Find P(F).
12. A pair of dice is thrown 3 times. If getting a total of 10 is considered a success, find the probability distribution of the number of success.
13. E and F are two events associated with a random experiment for which P(F) = 0.35, P(E or F) = 0.85, P(E and F)=0.15. Find P(E).
14. Three coins are tossed simultaneously. List the sample space for the event.
15. Two cards are drawn without replacement from a well shuffled pack of 52 cards. What is the probability that one is a red queen and the other is a king of black colour?
16. Two dice are thrown simultaneously. List the sample space for this event.
17. Two cards are drawn without replacement from a well shuffled pack of 52 cards. Find the probability that one is a spade and the other is a queen of red colour.
18. If A and B are two independent events such that $P(A \cup B)$ = 0.6 and P(A) = 0.2, find P(B).

19. A problem in Statistics is given to three students whose chances of solving it are $\frac{1}{2}$, $\frac{1}{3}$ *and* $\frac{1}{4}$ respectively. What is the probability that only one of them solves it correctly?

20. A pair of dice is thrown. Find the probability of getting a sum of 10 or more, if 5 appears on the first dice.

21. Bag A contains 6 white and 7 black balls, and another bag B contains 4 white and 5 black balls. One ball is drawn from the bag A and without noticing its colour, is put in the second bag B. A ball is then drawn from the second bag. Find the probability that the ball drawn is white in colour.

22. Bag A contains 4 white and 5 black balls, and another bag B contains 6 white and 7 black balls. One ball is drawn from the bag A and without noticing its colour, is put in the second bag B. A ball is then drawn from the second bag. Find the probability that the ball drawn is black in colour.

23. Bag A contains 4 white and 5 black balls, and another bag B contains 6 white and 7 black balls. One ball is drawn from the bag A and without noticing its colour, is put in the second bag B. Find the probability that the ball drawn is white in colour.

24. Three bags contain 7 white 8 red, 9 white 6 red, and 5 white 7 red balls respectively. One ball, at random, is drawn from each bag. Find the probability that all of them are of the same colour.

25. Three bags contain 5 white 8 red, 7 white 6 red and 6 white 5 red balls respectively. One ball is drawn from each bag at random. Find the probability that all the three balls drawn are of the same colour.

26. Two cards are drawn from a well shuffled pack of 52 cards one after the other without replacement. Find the probability that one of these is a queen and the other is a king of opposite colour.

27. A bag contains 2 white and 4 black balls while another bag contains 6 white and 4 black balls. A bag is selected at random and a ball is drawn. Find the probability that the ball drawn is of white colour.

28. A bag contains 3 white and 6 black balls while another bag contains 6 white and 3 black balls. A bag is selected at random and a ball is drawn. Find the probability that the ball drawn is of black colour.

29. A bag contains 2 white and 4 black balls while another bag contains 4 white and 2 black balls. A bag is selected at random and a ball is drawn. Find the probability that the ball drawn is of black colour.

30. Ramesh appears for an interview for two posts A and B for white selection is independent. The probability of his selection for post A is 1/6 and for post B is 1/7. Find the probability that Ramesh is selected for atleast one of the posts.

31. A speaks truth in 60% of the cases and B in 90% of the cases. In what percentage of cases are they likely to contradict each other in stating the same fact.

32. Two cards are drawn one by one without replacement from a well shuffled pack of 52 cards. Find the probability distribution of the number of aces.

33. A speaks truth in 65% of the cases and B in 80% of the cases. In what percentage of cases are they likely to contradict each other in stating the same fact?

34. Ganesh appears for an interview for two posts A and B; selection for which is independent. The probability of selection for post A is 1/5 and for post B is 1/8. What is the probability that Ganesh is selected for atleast one of the posts?

35. One bag contains 6 white and 5 black balls. Another bag contains 5 white and 3 black balls. One ball at random, is transferred from the first bag to the second. Find the probability that the ball drawn is white.

36. One bag contains 5 white and 6 blacks balls. Another bag contains 7 white and 3 black balls. One ball at random is transferred from the first bag to the second bag and then a ball is drawn from the second bag. Find the probability that the ball drawn is white.

37. Two dice are rolled. A is the event that the sum of the numbers shown on the two dice is 5. B is the event that at least one of the dice shows up a 3. Are the two events A and B (i) mutually exclusive. (ii) exhaustive ? Give arguments in support of your answer.

38. Four digit numbers are formed by using the digits 1, 2, 3, 4 and 5 without repeating any digit. Find the probability that a number, chosen at random, is an odd number.

39. A bag contains 4 yellow and 5 red balls and another bag contains 6 yellow and 3 red balls. A ball is drawn from the first bag and without seeing its colour, it is put into the second bag. Find the probability that if now a ball is drawn from the second bag, it is yellow in colour.

40. A bag contains 30 tickets, numbered from 1 to 30. Five tickets are drawn at random and arranged in ascending order. Find the probability that the third number is 20.

41. In a group of students, there are 3 boys and 3 girls. Four students are to be selected at random from the group. Find the probability that either 3 boys and 1 girls or 3 girls and 1 boy are selected.

42. If A and B are two independent events such that $P(A \cup B) = 0.5$, $P(A) = 0.2$, find P(B).

43. Find the probability of drawing a diamond cards in each of two consecutive draws from a well shuffled pack of cards, (i) if the card drawn is not replaced after the first draw, (ii) if the card drawn is replaced after the first draw.

44. If 2 dice are rolled 12 times, obtain the mean and the variance of the distribution of the successes if getting a total greater than 4 is considered a success.

45. A bag contains 5 red, 6 white and 7 black balls. Two balls are drawn at random. What is the probability that both balls are red or both are black?

46. A bag contains 8 red, 3 white and 9 blue balls. If three balls are drawn at random, determine the probability that :

(a) all the three balls are blue balls.

(b) all the balls are of different colours.

47. Bag A contains 6 red and 5 blue balls and another bag B contains 5 red and 8 blue balls. A ball is drawn from the bag A without seeing its colour and it is put into the bag B. Then a ball is drawn from bag B at random. Find the probability that the ball drawn is blue in colour.

48. In bag A there are 5 white and 8 red balls, in Bag B, 7 white and 6 red balls and in bag C, 6 white and 5 red balls. One ball is taken out at random from each bag. Find the probability that all the three balls are of the same colour.
49. Events A and B are given to be independent. Find P(B), if it is given that P(A) = 0.35, P ($A \cup B$) = 0.60.
50. A and B throw a dice alternately till one of them gets a "6" and wins the games. Find their respective probabilities of wining if A starts the game.
51. The probability of A solving a problem is 3/7 and that of B solving it is 1/3. What is the probability that :
    (i) Atleast one of them will solve the problem?
    (ii) Only one of them will solve the problem?
52. Events A and B are given to be independent. Find P(B), if it is given that P(A) = 0.40, P($A \cup B$) = 0.70.
53. A box contains 100 bolts and 50 nuts. It is given that 50 % bolts and 50% nuts are rusted. Two objects are selected from the box at random. Find the probability that both are bolts or both are rusted.
54. The probability of A hitting a target is 4/5 and that of B hitting it is 2/3. They both fire at the target. Find the probability that :
    (i) atleast one of them will hit the target.
    (ii) only one of them will hit the target.
55. An urn contains 7 white, 5 black and 3 red balls. Two balls are drawn at random. Find the probability that :
    (i) both the balls are red
    (ii) one ball is red, the outer is black
    (iii) one ball is white
56. A fair dice is tossed twice. If the number appearing on the top is less than 3, it is a success. Find the probability distribution of success.
57. Cards are drawn at random from a pack of well shuffled 52 cards. Find the probability that :
    (i) all the three cards are of the ame suit;
    (ii) one is a king, the other is a queen and the third is a jack.
58. An urn contains 6 white, 4 black and 5 red balls. Two balls are drawn at random. Find the probability that :
    (i) Both the balls are red
    (ii) one ball is red, the other is black.
    (iii) one ball is white.
59. From a bag containing 20 tickets, numbered from 1 to 20, two tickets are drawn at random. Find the probability that :
    (i) both the tickets have prime numbers on them;
    (ii) on one there is a prime number and on the other there is a multiple of 4.
60. Two dice are tossed once. Find the probability of getting an even number on the first dice or a total of 8.

61. From a lot of 30 bulbs, which includes 6 defective bulbs, a sample of 3 bulbs is drawn at random with replacement. Find the probability distribution of the number of defective bulbs.
62. Two dice are tossed together. Find the probability of getting a doublet or a total of 10.
63. Two cards are drawn successively of random, without replacement, from a well shuffled pack of 52 cards. Find the probability distribution of number of aces.
64. Two dice are tossed together. Find the probability of getting a doublet or a total of 6.
65. Two cards are drawn successively, without replacement, from a well-shuffled pack of 52 cards. Find the probability distribution of number of spades.
66. In a single throw of three dice, determine the probability of getting (a) a total of 5, (b) a total of at most 5.
67. A class consists of 10 boys and 8 girls. Three students are selected at random. Find the probability that the selected group has
    (i) All boys, (ii) all girls, (iii) 2 boys and 1 girl.
68. Four cards are drawn randomly from a well shuffled pack of 52 cards. Find the probability of getting 3 diamonds and one spade.
69. An integer is chosen at random from the first 200 positive integers. Find the probability that it is divisible by 6 or 8.
70. X is taking up subjects-Mathematics, Physics and Chemistry in the examination. His probabilities of getting Grade A in these subjects are 0.2, 0.3 and 0.5 respectively. Find the probability that he gets
    (i) Grade A in all subjects;
    (ii) Grade A in no subjects;
    (iii)Grade A in two subjects.
71. Two balls are drawn at random with replacement from a box containing 10 black and 8 red balls. Find the probability that (i) both balls are red (ii) the first ball is black and the second is red (iii) one of them is black and the other red.
72. A machine operates if all of its three components function. The probability that the first component fails during the year is 0.14, the second component fails is 0.10 and the third component fails is 0.05. What is the probability that the machine will fail during the year?
73. A coin is biased so that the head is 3 times as likely to occur as a tail. If the coin is tossed twice, find the probability distribution for the number of tails.
74. The probability that a person will get an electric contract is 2/5 and the probability that he will not get plumbing contract is 4/7. If the probability of getting atleast one contract is 2/3, what is the probability that he will get both?
75. Find the probability distribution of number of doubles in three throws of a pair of dice.
76. An integer is chosen at random from the first hundred positive integers. Find the probability the chosen integer is divisible by 6 or 8.
77. Two unbiased dice are tossed simultaneously. Find the probability that the sum of the numbers will be a multiple of 3 or 5.

78. There are two bags. The first bag contains 4 white and 2 black balls, while the second bag contains 3 white and 4 black balls. A bag is picked up at random and a ball is drawn out. Find the probability that it is a white ball.
79. Two dice are rolled once. Find the probability that:
    (a) The number on two dice is different.
    (b) The total of numbers on the two dice is at least 4
80. A pair of dice is tossed twice. If the random variable X is defined as the number of doubles, find the probability distribution of X.
81. There are 4 letters and 4 addressed envelopes. Find the probability that all the letters are not despacted in the right envelope.
82. An unbiased coin is tossed 6 times. Find using Binomial distribution, the probability of getting at least 5 heads.
83. A company has two plants to manufacture scooters. Plant-1 manufactures 70% of the scooters and Plant-2 manufactures 30%. At Plant-1, 80% of the scooters are rated of standard quality and at Plant-2, 90% of the scooters are rated of standard quality. A scooter is chosen at random and is found to be of standard quality. Find the probability that it has come from Plant-2.
84. An unbiased coin is tossed 8 times. Find, by using binomial distribution, the probability of getting at least 3 heads.
85. An insurance company insured 2000 scooter drivers, 4000 car drivers and 6000 truck drivers. The probability of an accident involving a scooter, a car and truck is 1/100, 3/100 and 3/20 respectively. One of the insured persons meets with an accident. What is the probability that he is a scooter driver?
86. An unbiased coin is tossed 10 times. Find, by using binomial distribution, the probability of getting at least 3 heads.
87. A student is given a test with 8 items of true-false type. If he gets 6 or more items correct, he is declared a pass. Given that he guesses the answer to each item, compute the probability that he will pass in the test.
88. Using binomial probability distribution, find the probability of obtaining "less than 3 heads" when an unbiased coin is tossed 6 times.
89. Using binomial probability distribution, find the probability of obtaining "more than 5 heads" when an unbiased coin is tossed 8 times.
90. If X follows binomial distribution with mean 4 and variance 2, find $P(X \geq 5)$.
91. An insurance company insured 3000 scooters, 4000 cars and 5000 trucks. The probabilities of an accident involving a scooter, a car and a truck are 0.02, 0.03 and 0.04 respectively. One of the insured vehicles meets with an accident. Find the probability that (i) it is a scooter, (ii) it is a car, (iii) it is a truck.
92. If X follows binomial distribution with mean 3 and variance 3/2, find $P(X \leq 5)$.
93. If X follows binomial distribution with mean 3 and variance 3/2, find $P(X \geq 1)$.
94. A factory has three machines X, Y and Z producing 1000, 2000 and 3000 bolts per day respectively. The machine X produces 1% defective bolts. Y produces 1.5% and Z produces 2% defective bolts. At the end of a day, a bolt is drawn at random and is found defective. What is the probability that this defective bolt has been produced by the machine X?

95. A card from a pack of 52 cards is lost. From the remaining cards of the pack, two cards are drawn and are found to be spade, find the probability of the missing card to be spade.
96. If two dice are rolled 12 times, obtain the 'mean' and the 'variance' of the distribution of success if getting a total greater than 4 is considered a success.
97. In a bolt factory, three machines A, B and C manufacture 25, 35 and 40 per cent of the total bolts manufactured. Of their output, 5, 4, and 2 per cent are defective respectively. A bolt is drawn at random and is found to be defective. Find the probability that it was manufactured by either machine A or C.
98. A company has two plants to manufacture bicycles. The first plant manufactures 60% of the bicycles and the second plant 40%. 80% of the bicycles are rated of standard quality of the first plant and 90% of standard quality at the second plant. A bicycle is picked up at random and found to be of standard quality. Find the probability that it comes from the second plant.
99. Six coins are tossed simultaneously. Find the probability of getting
    (i) 3 heads
    (ii) No heads
    (iii)atleast one head
100. There are two identical boxes containing respectively 4 white and 3 red balls, 3 white and 7 red balls. A box is chosen at random and a ball is drawn from it. If the ball drawn is white, what is the probability that it is from the first box?
101. From a well shuffled pack of 52 cards, 3 cards are drawn one-by-one with replacement. Find the probability distribution of number of queens.
102. Three urns A, B and C contain 6 red and 4 white; 2 red and 6 white; and 1 red and 5 white balls respectively. An urn is chosen and a ball is drawn is found to be red, find the probability that the ball was drawn from urn A.
103. The mean and variance of a binomial distribution are 4 and 4/3 respectively. Find $P(X \geq 5)$.
104. If the sum of the mean and variance of a binomial distribution for 5 trials be 1.8, find the distribution.
105. The mean and variance of a binomial distribution are 4/3 and 8/9 respectively. Find $P(X \geq 5)$.
106. If the sum of the mean and variance of a binomial distribution for 6 trials be 10/3, find the distribution.
107. Three urns A, B and C contain 4 red and 6 white; 3 red and 5 white; and 2 red and 4 white balls respectively. An urn is chosen and a ball is drawn is found to be red, find the probability that the ball was drawn from urn A.
108. A company has two plants to manufacture T.Vs. The first plant manufactures 70% of the T.Vs and the rest are manufactured by the other plant. 80% of the T.Vs manufactured by the first plant are rated of standard quality, while that of the second plant only 70% are of standard quality. If a T.V. chosen at random is found to be of standard quality, find the probability that it was produced by the first plant.
109. A pair of dice is thrown 7 times. If getting the total 7 is considered a success, find the probability of (i) no success, (ii) at least 6 success.

110. A can solve 90% of the problems given in a book and B can solve only 70% problems. What is the probability that atleast one of them will solve the problem selected at random from the book.

111. A is known to speak the truth 3 times out of 5 times. He throws a dice and reports that it is 1. Find the probability it is actually 1.

112. A factory has three machines A, B and C, which produce 100, 200 and 300 items of a particular type daily. The machines produce 2%, 3% and 5% defective items respectively. One day when the production was over, an item was picked up randomly and it was found to be defective. Find the probability that it was produced by machine A.

113. Bag A contains 3 white and 2 red balls. Bag B contains 4 white and 5 red balls. One ball is drawn at random from one of the bags and is found to be red. Find the probability that is was drawn from Bag B.

114. The mean and variance of a binomial distribution are 12 and 3 respectively. Find the probability distribution.

115. A box contains 2 gold and 3 silver coins. Another box contains 3 gold and 3 silver coins. A box is chosen at random and a coin is drawn from it. If the selected coin is a gold coin, find the probability that it was drawn from the second box.

116. 10% of the tools produced by a machine are defective. Find the probability distribution of the number of defective tools in a sample of 3 draws at random.

117. A box contains 4 gold and 3 silver coins. Another box contains 3 gold and 5 silver coins. A box is chosen at random and a coin is drawn from it. If the selected coin is a gold coin, find the probability that it was drawn from the second box.

118. The probability that students entering a university will graduate is 0.4. Find the probability that out of 3 students of the university:

(i) none will graduate,

(ii) only one will graduate,

(iii)all will graduate.

119. An insurance company insured 2000 scooters and 3000 motor cycles. The probability of an accident involving a scooter is 0.01 and that of a motor cycle is 0.02. An insured vehicle met with an accident. Find the probability that the accidented vehicle was a motor cycle.

120. A man is known to speak the truth 3 out of 4 times. He throws a dice and reports that it is a six. Find the probability that it is actually a six.

121. A speaks the truth 8 times out of 10 times. A dice is tossed. He reports that it was 5. What is the probability that it was actually 5?

122. A coin is tossed 4 times. Find the mean and variance of the probability distribution of the number of heads.

123. A bag contains 1 white and 6 red balls, and a second bag contains 4 white and 3 red balls. One of the bags is picked up at a random and a ball is randomly drawn from it, and is found to be white in colour. Find the probability that the drawn ball was from the first bag.

124. For A, B and C the chances of being selected as the manager of a firm are in the ratio 4 : 1 : 2 respectively. The respective probabilities for them to introduce a radical change in marketing strategy are 0.3, 0.8 and 0.15. If the change does take place, find the probability that it is due to the appointment of B or C.

125. Two cards are drawn successively with replacement from a well-shuffled pack of 52 cards. Find the mean and variance for the number of aces.

126. A pair of dice is thrown 200 times. If getting a sum of 9 is considered a success, find the mean and variance of the number of successes.

127. The mean and variance of a binomial distribution for a random variable are 10 and 5/3 respectively. Find P($X \geq 1$).

128. There are two Bags I and II. Bag I contains 3 white and 4 black balls and Bag II contains 5 white and 6 black balls. One ball is drawn at random from one of the bags and is found to be white. Find the probability that is drawn from Bag I.

129. Two bags A and B contain 2 white, 4 red; and 3 white, 3 red balls respectively. One of the bags is selected at random and a ball is drawn from it. If the selected ball is of white colour, find the probability that it is drawn from bag A.

130. An urn contains 5 white and 3 red balls. Find the probability distribution of the number of red balls, with replacement in three draws.

131. In a box containing 50 bulbs 5 are defective. What is the probability that a sample of 5 bulbs with have at most 2 defective bulb?

132. Two persons A and B throw a dice alternately till one of them gets 5 and wins the game. A starts the game. Find the respective probabilities of their of their winning the game.

133. The probability of hitting a target by A is 1/5. If he fires 5 times, find the probability that he will hit at least two times.

134. If the mean and variance of a binomial distribution are respectively 9 and 6, find the distribution are respectively 9 and 6, find the distribution.

135. Two cards are drawn successively with replacement from a well shuffled pack of 52 cards. Find the probability distribution of number of jacks.

136. A pair of dice is thrown 6 times. Getting a total of 7 on the two dice is considered a success. Find the probability of getting :

(i) atleast 5 successes

(ii) exactly 5 successes

137. In a class having 60% boys, 5% of the boys and 10% of the girls have an I.Q. of more than 150. A student is selected at random and found to have an I.Q. of more than 150. Find the probability that the selected student is a boy.

138. In a class having 70% boys, 20% of the boys and 10% of the girls are players. A student is selected at random from the class and found to be a player. Find the probability that the selected student is a girl.

139. There are two bags I and II. Bag I contains 2 White and 4 Red balls and bag II contains 6 white and 3 Red balls. One ball is drawn at random from one of the bags and is found to be red. Find the probability that it was drawn from bag II.

140. Find the mean μ and variance σ^2 for the following probability distribution.

X	0	1	2	3
P(X)	1/6	1/2	3/10	1/30

141. Determine the binomial distribution whose mean is 20 and variance 16.

142. An urn contains 4 red balls and 7 blue balls. Two balls are drawn at random with replacement. Find the probability of getting

(i) 2 red balls (ii) 2 blue balls (iii) one red and one blue ball

143. A card is drawn out from a well shuffled pack of 52 cards of E is the event "the card drawn out is a king as a queen" and F is the event "the card drawn out is a queen or an ace". Find the probability P(E/F).

144. Two cards are drawn simultaneously from a well shuffled pack of 52 cards. Find the mean and standard deviation of the number of kings.

145. In a factory which manufactures bolts, machines A, B and C manufacture respectively 25%, 35% and 40% of the bolts. Of their output 5, 4 and 2 percent are respectively defective bolts. A bolt is drawn at random from the total production and is found to be defective. Find the probability that it is manufactured by the machine B.

146. In a factory which manufactures bolts, machines A, B and C manufacture respectively 35%, 25% and 40% of the bolts. Of their output 5, 4 and 4 percent are respectively defective bolts. A bolt is drawn at random from the total production and is found to be defective. Find the probability that it is manufactured by the machine B.

147. In a factory which manufactures bolts, machines A, B and C manufacture respectively 35%, 35% and 30% of the bolts. Of their output 5, 4 and 3 percent are respectively defective bolts. A bolt is drawn at random from the total production and is found to be defective. Find the probability that it is manufactured by the machine B.

148. A and B throw a pair of dice by turn. The first to throw 9 is awarded a prize. If A starts the game, show that the probability of A getting the prize is 9/17.

149. A man is known to speak truth 3 out of 4 times. He throws a dice and reports that it is a 6. Find the probability that it is actually 6.

150. An insurance company insured 2000 scooter drivers, 3000 car drivers and 4000 truck drivers. The probabilities of their meeting with an accident respectively are 0.04, 0.06 and 0.15. One of the insured persons meets with an accident. Find the probability that he is a car driver.

151. An insurance company insured 3000 scooter drivers, 5000 car drivers and 7000 truck drivers. The probabilities of their meeting with an accident respectively are 0.04, 0.05 and 0.15. One of the insured persons meets with an accident. Find the probability that he is a car driver.

152. A pair of dice is thrown 4 times. If getting a doublet is considered a success, find the probability distribution of number of successes.

153. An insurance company insured 2000 scooter drivers, 4000 car drivers and 6000 truck drivers. The probability of an accident involving a scooter, a car and a truck are 0.01, 0.03, and 0.15 respectively. One of the insured persons meets with an accident. What is the probability that he is a scooter driver.

Note : if any mistake on this, kindly inform on the mail id : bknal1207@gmail.com

Your Observation! Our Correction !!